MOTOROLA

December 3, 1999

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
The Portals, TW-A325
445 12th Street, S.W.
Washington, D.C. 20554

Re: Ex Parte Notification – WT Docket No. 99-168

Dear Ms. Salas:

This letter is being filed on behalf of Motorola, Inc. (Motorola). On December 2, 1999, Rich Barth, Leigh Chinitz, John Lyons, Mary Brooner and Jeanine Poltronieri, of Motorola met with Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau (WTB), Kathleen O'Brien Ham, Deputy Chief, WTB, James Schlichting, Deputy Chief, WTB, Kris Monteith, Chief, Policy Division, Mark Bollinger, Deputy Chief, Auctions and Industry Analysis Division, and Stan Wiggins, Attorney-Advisor, Policy Division. Motorola discussed its comments on *Notice of Proposed RuleMaking* in the above-referenced proceeding.

Motorola discussed its views that Motorola's plan for the 746-806 MHz band provides the greatest benefit to the public by maximizing efficient use of the spectrum and minimizing the amount of spectrum used as guard-band to protect adjacent services.

In response to questions from staff, Motorola described minimum frequency separation requirements needed to satisfy necessary out-of-band emission limits for the non-guard band base stations in the 700 MHz band.

In a separate filing Motorola has described why it believes that the out-of-band emission requirement for non-frequency coordinated base stations in the 700 MHz band should be no greater than -57 dBm in the first 6.25 kHz channel of the Public Safety allocation from 764-776 MHz.

In proposing rules for the use of the spectrum in the 700 MHz band, Motorola has made every effort to ensure that all anticipated 3G technologies will be permitted by those rules. One of the technologies requiring the most bandwidth is the so-called wideband CDMA, or W-CDMA technology. This is a direct sequence spread spectrum technology with a 3.84 million chips per second (Mcps) spreading rate.

Because of our participation in the technical study groups working on radio transmission and reception specifications for this technology (which includes discussions of emission masks) Motorola is very familiar the details of this technology. In addition, Motorola has extensive experience with current and reasonably anticipated filter technologies. The results of our analysis are that, based on all currently available information and using aggressive, but reasonably achievable filtering technologies, it is possible to achieve the -57 dBm out-of-band emission level at a frequency separation of 5.25 MHz from the center of a 3.84 Mcps W-CDMA carrier. More specifically, given a W-CDMA signal, the spurious response requirement in the 3GPP document TS25.104 v. 3.0.0 is -13 dBm / MHz at a 4 MHz offset. This equates to -35 dBm / 6.25 kHz. ($10\times\log10(1000/6.25) = 22$ dB, and -13 - 22 = -35.) At a 5.25 MHz offset, the signal rolls off an additional 6 dB, resulting in a -41 dBm / 6.25 kHz value. Through a combination of duplexer and cavity filter attenuation, the signal can be attenuated the additional 16 dB to achieve the -57 dBm / 6.25 kHz limit.

Please contact Leigh Chinitz at (202) 371-6940 regarding any questions concerning this matter.

Respectfully Submitted,

_____/s/_____
Leigh Chinitz
Motorola, Inc.

cc:
Thomas J. Sugrue
Kathleen O'Brien Ham
Jim Schlichting
Kris Monteith
Mark Bollinger
Stan Wiggins
Martin Liebman